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Issued in the interest of corn-borer control conducted by the United States Department of Agriculture in cooperation with the State departments of agriculture and State agricultural colleges in New York, Pennsylvania, Ohio, Michigan, and Indiana.

BUREAU OF ENTOMOLOGY

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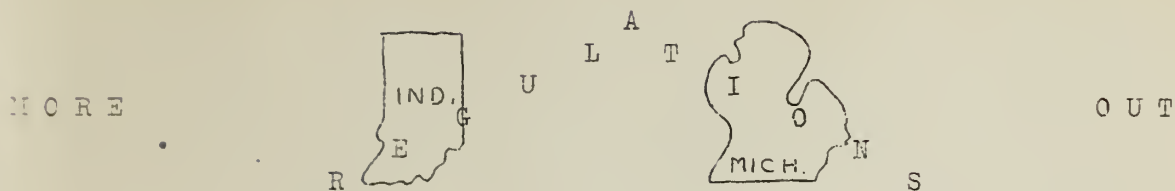
EDUCATIONAL CONFERENCE

NEW YORK educational workers met in Rochester, October 1, to formulate a program for educational work in the State. The State director of extension, C. E. Ladd, presided at the meeting, which was attended by 32 representatives of the United States Department of Agriculture, the State department of farms and markets, the State agricultural college, the State extension service, and the State experiment station.

"CUT EARLY AND LOW" was the general opinion of all present at the conference. The demonstrations in low cutting were reported to be working out successfully with a favorable attitude shown by the farmers and no adverse criticism reported.

IF REGULATIONS are to be put into effect the farmers would appreciate knowing about it this fall, was the opinion of the county agents present. They reported very few intentional violations of the regulations in 1927.

THE ENTOMOLOGISTS present submitted a report stating that the widespread distribution of the insect and its occurrence in cornfields generally make clear that the corn borer is permanently established and that its control is to be obtained by the adoption of good agricultural practices by the individual farmer. And further: "-----We would advise continuing the recommendations of last year stressing particularly the importance of using corn for ensilage, plowing under of stalks and stubble, disposal of corn refuse, close cutting, and late planting, using such of these measures as are adapted to the machinery and cultural practices of the individual farmer and avoiding, as far as possible, the incurring of expenses not amply justified by his circumstances."



Indiana regulations issued by the State department of conservation include "any area which heretofore has been or hereafter may be declared by said department to be infested area."

The regulations require that all cornstalks and parts, remnants, and residues of cornstalks of each year's crop be destroyed or treated before May 1 of the year succeeding the growth of that corn, by either or by a combination of the following methods: (a) Burning; (b) snapping, raking, and burning so as to leave not more than 10 lineal feet of such product or material upon any square rod of land; (c) tramping into and covering with manure; (d) plowing under and by regular or special field procedure.

Ear corn, husked and stored for grain, ensilage, corn fodder, finely shredded or finely ground; corncobs or pieces of cobs, when not mixed with stalks or remnants or parts of stalks; corn stubble which has been cut to not more than 4 inches in height, need not be treated as above.

Michigan regulations require all corn crop parts etc., and ALL COARSE-STEMMED WEEDS within cornfields to be destroyed, (a) preferably by burning before May 1 of the year succeeding the growth of that corn; or (b) such material shall be so treated or handled by regular or by special field procedure prior to May 1 of the year succeeding the growth of that corn as to insure that between May 1 and July 10 of that year no portion shall appear on the surface.

EXCEPTIONS: Ear corn stored for grain, fast corn stubble in clean cornfields which are not more than 2 inches in height above the soil surface, ensilage, corn finely shredded, or ground, completely plowed under, burned, or trampled into and deeply covered by manure.

The printed pamphlet also contains an interpretation of regulations and recommendations and methods to meet regulations in fields containing corn stubble and in fields containing uncut stalks.

UP TO THE MINUTE IN PENNSYLVANIA

A snappy little leaflet, "Fight the Corn Borer," has been issued by the Pennsylvania State Department of Agriculture and sent to every farmer in the eight counties included in the campaign area. It contains suggestions on meeting inspection requirements with the easily remembered refrain, "Put low. Clean up. Start in time."



A summary report of all quarantine-line inspections discloses that -

MICHIGAN inspectors have stopped 1,703,778 cars, and 2,897 dozen ears of corn have been taken.

OHIO inspectors have stopped 1,130,329 cars, and 1,580 $\frac{1}{2}$ dozen ears of corn have been taken.

INDIANA inspectors have stopped 474,151 cars, and 995 $\frac{1}{2}$ dozen ears of corn have been taken.

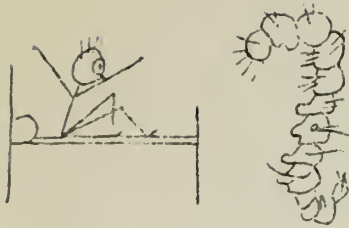
PENNSYLVANIA inspectors have stopped 71,411 cars, and 178 9/12 dozen ears of corn have been taken.

On extensively traveled roads an inspector is on duty during the whole 24 hours of each day. On lesser-traveled roads inspection takes place from 12 to 16 hours per day.

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That in some localities consumers are showing a lack of demand for canned sweet corn on the ground that it is likely to contain corn borers is indicated in reports recently made to the department, says Dr. A. F. Woods, in general charge of the corn-borer campaign, U. S. Department of Agriculture. According to best advices, the department considers that there is no likelihood of any canned corn containing borers. In the first place, only a small supply of sweet corn used for canning comes from the infested area. Secondly, corn obtained from area or adjacent territory is twice submitted to a rigid inspection. First it is inspected in the field, and if any borers are found, the corn from that grower is not accepted. Upon delivery all sweet corn is inspected carefully before being unloaded and is refused if any trace of the borer is found. Cannerymen in this area have cooperated to the fullest extent with State and Federal authorities in the control of the borer by destroying all infested material and corn refuse of all kinds and in preventing the use of any contaminated corn for canning purposes.

"OLD JAKE WAKES UP"



is the title of the latest corn-borer picture filmed by the department office of motion pictures. The picture is designed to awaken interest in corn-borer control and at the same time to afford a measure of comic relief at meetings. The story is about a stubborn farmer who considers the seriousness of the spread of the corn borer

a pipe dream until he finds his own fields heavily infested. A nightmare, in which real corn borers are magnified by trick photograph so as to assume huge proportions, provides the comedy and also serves to strengthen the farmer's resolve to clean up his fields. The picture is in one reel. Copies may be borrowed for short periods or may be purchased at the laboratory charge.

The paragraphs quoted below are taken from an article entitled "The Corn-Borer Situation," which recently appeared in The Michigan Farmer:

"We can not expect to eradicate the corn borer. What we should try to do is to learn to live with the pest so we may continue to grow corn without loss. The county agents and extension men, at a conference at Monroe last week, expressed the belief that we can keep on growing corn profitably if we but practice clean methods.

"The consensus of opinion among these extension men, who probably are closer in contact with the exact situation in the State than any other group, was that the campaign last spring, as a whole, was a success. This they believe to be the case in spite of the disadvantages resulting from the limited time in which to organize and do the work, and of changing farm practices in a single season. All commented on the farmer co-operation in this State, which was placed at 95 per cent of those within the quarantined area."

"QUESTIONS AND ANSWERS
ON THE EUROPEAN CORN BORER"

which was put out during the spring campaign, has been brought up-to-date. The revised copy, now available, includes the results of the spring campaign, fall survey figures of the number of borers now present in the infested area, and new territory in which the borer has been found.



WHEN DOES COMMERCIAL DAMAGE TAKE PLACE?

Commercial damage depends upon the variety of corn and the size of the stalk. As a rule, an infestation of 5 borers per stalk produces little commercial loss, whereas an infestation of 50 borers produces loss of the crop. A commercial loss will probably be felt with 10 borers per stalk in field corn and slightly less in sweet corn.

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SCOUTING

for borers in new territory is still being carried on under the direction of L. H. Worthley. The following townships have been added since the last published list. There are 472 scouts engaged in this work.

INDIANA

Allen County: Lafayette.
Huntington County: Salamonie.
Jay County: Greene.

PENNSYLVANIA

Luzerne County: Hanover.
Monroe County: Stroud.

OHIO

Clark County: Springfield.
Licking County: Etna.
Madison County: Fairfield.
Perry County: Clayton, Madison, Reading.

MICHIGAN

Alcona County: Greenbush, Gustin, Harrisville, Hawes, Haynes, Mikado.
Arenac County: Standish.
Cheboygan County: Aloha, Forest.
Iosco County: Au Sable.
Presque Isle County: Allis, Case, Posen, Pulawski, Rogers.
St. Joseph County: Nottawa.

ON THE LAST TWO PAGES

are charts taken from the report given out at the third annual conference of the International European Corn-borer Organization, giving the intensity of the corn-borer infestation in the five campaign States as shown by the fall survey figures.

PERCENTAGE OF INCREASE OR DECREASE IN AVERAGE TOTAL LARVAE PER 100 PLANTS

Data for 1927 as of date of September 19, 1927. Counts of degree of infestation were started this year in the areas of greatest infestation and are progressing outward. The counts for 1925 and 1926 include the border territory and hence include many zero areas. The counts for 1927 have not yet reached the zero areas at all points. Hence, the final 1927 count, when available, will probably be even more favorable than the 1927 data included to date in this chart. Indiana is not included because it is beyond the zero border. For New York and Pennsylvania only the area covered by the 1927 spring clean-up is included in the 1927 figures.

State	Percentage of Decrease	Percentage of Increase
MICHIGAN:		
1926 over 1925...		612
1927 over 1926...		232.9
OHIO:		
1926 over 1925...		184.2
1927 over 1926...	25.5	
NEW YORK:		
1926 over 1925...		56.3
1927 over 1926...		54.
PENNSYLVANIA:		
1926 over 1925...		147.7
1927 over 1926...		168.8
ALL STATES ABOVE:		
1926 over 1925...		280.1
1927 over 1926...		61.84

Comparison of infestation surveys in Michigan, Ohio, New York, and Pennsylvania, 1925, 1926, 1927

State	Total number of townships in- cluded in surveys			Total number of fields examined in survey			Total number of acres in fields examined		
	1925	1926	1927	1925	1926	1927	1925	1926	1927
Michigan.....	56	125	192	276	617	960	2,315	4,487	6,132
Ohio.....	150	192	406	742	954	2,030	4,663	7,487	13,019
New York.....	68	63	81	338	315	405	992	964	1,414
Pennsylvania	28	38	64	140	190	320	484	599	985
Grand totals	302	418	743	1,496	2,076	3,715	8,454	13,537	21,550

State	Average percentage of stalks infested		Average number of larvae per infested stalk				Total larvae per 100 stalks		
	1925	1926	1927	1925	1926	1927	1925	1926	1927
Michigan....	1.10	3.7	11.80	1.36	2.87	3.01	1.50	10.73	35.56
Ohio.....	1.48	2.17	2.0	1.29	2.49	2.02	1.90	5.40	4.02
New York....	1.56	3.18	6.07	2.87	2.20	1.78	4.48	7.0	10.78
Pennsylvania.	1.28	1.92	6.57	2.08	3.43	2.70	2.66	6.59	17.72
Average for whole area.	1.35	2.95	7.67	1.56	2.72	1.69	2.11	8.02	12.98

*Figures for survey not complete September 19, 1927.

